

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1, 2 and 4-10 are pending in the present application. Claims 1 and 2 are amended by the present amendment. Support for amended Claims 1 and 2 can be found at least in the original claims, and at page 5, line 22 to page 6, line 9 of the specification, for example. No new matter is added.

In the outstanding Office Action, Claims 1, 2 and 9 were rejected under 35 U.S.C. § 102(b) as anticipated by JP 59-180839 (herein “JP ‘839”); Claims 1, 2, 6, 7 and 9 were rejected under 35 U.S.C. § 102(b) as anticipated by JP 61-153850 (herein “JP ‘850”); Claims 1, 2, 4, 5 and 9 were rejected under 35 U.S.C. § 102(b) as anticipated by EP-708439 (herein “EP ‘439”); Claims 1, 2, 4-7 and 9 were rejected under 35 U.S.C. § 103(a) as unpatentable over Yamada et al. (U.S. Patent 5,635,267, herein “Yamada”) in view of Alles (U.S. Patent 3,458,311) or Kamijima et al. (U.S. Patent 6,465,149, herein “Kamijima”); and Claims 1, 2 and 4-10 were rejected under 35 U.S.C. § 103(a) as unpatentable over EP ‘439 in view of Pampalone et al. (U.S. Patent 4,609,614, herein “Pampalone”) and Specht et al. (U.S. Patent 4,289,844, herein “Specht”).

In response to the rejections of Claims 1, 2 and 9 under 35 U.S.C. § 102(b) as anticipated by JP ‘839, Claims 1, 2, 6, 7 and 9 under 35 U.S.C. § 102(b) as anticipated by JP ‘850, and Claims 1, 2, 4, 5 and 9 under 35 U.S.C. § 102(b) as anticipated by EP ‘439, Applicants respectfully traverse these rejections as discussed next.

For example, amended Claim 1 is directed to a method for producing a photoresist master for an optical information medium that includes, among other things, the following features:

“... applying a coating solution including a co-initiator and a thermally crosslinkable compound on a substrate, the co-initiator including an aliphatic or an aromatic amine; forming a light absorbing layer on the substrate by heating and curing the applied coating solution”

Applicants respectfully submit that one of the benefits of having a co-initiator including an aliphatic or an aromatic amine in a coating solution is that such co-initiator does not decompose easily when heating and curing the coating solution to form a light absorbing layer, and as a result, it is possible to prevent a reduction in a light absorption property of the light absorbing layer. Accordingly, when exposing a photoresist layer to a laser beam to form a latent image in the photoresist layer, a sufficient absorption of the laser beam by the light absorbing layer can be attained, and it becomes possible to develop a much sharper protrusion/depression pattern in the photoresist layer.

Turning to the reference of JP '839, JP '839 discloses a groove forming method of master disk (see the abstract).

Turning to the reference of JP '850, JP '850 discloses an original disk for optical disk and its manufacture (see the abstract).

Turning to the reference of EP '439, EP '439 discloses an exposure master disc (see the abstract).

However, Applicants respectfully submit that none of JP '839, JP '850 and EP '439 discloses or suggests the “applying a coating solution” and the “forming a light absorbing layer” as recited in amended Claim 1.

Accordingly, it is respectfully submitted that independent Claim 1 and each of the claims depending therefrom are believed to patentably distinguish over JP '839, JP '850 and EP '439, and that the above-noted benefit obtained thereby is not obviated.

In addition, Applicants respectfully submit that none of JP '839, JP '850 and EP '439 discloses or suggests the “co-initiator” as recited in amended Claim 2.

Accordingly, it is respectfully submitted that Claim 2 is believed to patentably distinguish over JP '839, JP '850 and EP '439.

In response to the rejection of Claims 1, 2, 4-7 and 9 under 35 U.S.C. § 103(a) as unpatentable over Yamada in view of Alles or Kamijima, Applicants respectfully traverse this rejection as discussed next.

For example, as presented above, amended Claim 1 is directed to a method for producing a photoresist master for an optical information medium that includes, among other things, the following features:

“... applying a coating solution including a co-initiator and a thermally crosslinkable compound on a substrate, the co-initiator including an aliphatic or an aromatic amine; forming a light absorbing layer on the substrate by heating and curing the applied coating solution”

Also, Applicants presented above that one of the benefits of having a co-initiator including an aliphatic or an aromatic amine in a coating solution is that such co-initiator does not decompose easily when heating and curing the coating solution to form a light absorbing layer, and as a result, it is possible to prevent a reduction in a light absorption property of the light absorbing layer. Accordingly, when exposing a photoresist layer to a laser beam to form a latent image in the photoresist layer, a sufficient absorption of the laser beam by the light absorbing layer can be attained, and it becomes possible to develop a much sharper protrusion/depression pattern in the photoresist layer.

Turning to the reference of Yamada, Yamada discloses a method of making optical information recording media (see column 10, line 47 to column 11, line 10).

Turning to the reference of Alles, Alles discloses an antihalation layer including benzophenone (see column 9, lines 44-50).

Turning to the reference of Kamijima, Kamijima discloses a benzophenone-based dye (see column 7, lines 52-65).

However, Applicants respectfully submit that none of Yamada, Alles and Kamijima discloses or suggests the “applying a coating solution” and the “forming a light absorbing layer” as recited in amended Claim 1.

In addition, because none of Yamada, Alles and Kamijima discloses or suggests the “applying a coating solution” and the “forming a light absorbing layer” as recited in amended Claim 1, the combined teachings of these references do not render obvious the method as recited in amended Claim 1.

Accordingly, it is respectfully submitted that independent Claim 1 and each of the claims depending therefrom are believed to patentably distinguish over Yamada, Alles and Kamijima, and that the above-noted benefit obtained thereby is not obviated.

In addition, Applicants respectfully submit that none of Yamada, Alles and Kamijima discloses or suggests the “co-initiator” as recited in amended Claim 2.

Accordingly, it is respectfully submitted that Claim 2 is believed to patentably distinguish over Yamada, Alles and Kamijima.

In response to the rejection of Claims 1, 2 and 4-10 under 35 U.S.C. § 103(a) as unpatentable over EP '439 in view of Pampalone and Specht, Applicants respectfully traverse this rejection as discussed next.

For example, as presented above, amended Claim 1 is directed to a method for producing a photoresist master for an optical information medium that includes, among other things, the following features:

“... applying a coating solution including a co-initiator and a thermally crosslinkable compound on a substrate, the co-initiator including an aliphatic or an aromatic amine; forming a light absorbing layer on the substrate by heating and curing the applied coating solution”

Also, Applicants presented above that one of the benefits of having a co-initiator including an aliphatic or an aromatic amine in a coating solution is that such co-initiator does not decompose easily when heating and curing the coating solution to form a light absorbing layer, and as a result, it is possible to prevent a reduction in a light absorption property of the light absorbing layer. Accordingly, when exposing a photoresist layer to a laser beam to form a latent image in the photoresist layer, a sufficient absorption of the laser beam by the light absorbing layer can be attained, and it becomes possible to develop a much sharper protrusion/depression pattern in the photoresist layer.

Turning to the reference of EP '439, as discussed above, EP '439 does not disclose or suggest the “applying a coating solution” and the “forming a light absorbing layer” as recited in amended Claim 1.

Turning to the reference of Pampalone, Pampalone discloses an absorptive layer including a dye, a monomer and a photoinitiator (see column 2, lines 43-52). However, Pampalone does not disclose or suggest the “applying a coating solution” and the “forming a light absorbing layer” as recited in amended Claim 1.

Turning to the reference of Specht, Specht discloses a co-initiator including a photopolymerization activator and a photosensitizer (see the abstract). However, Specht does not disclose or suggest the “applying a coating solution” and the “forming a light absorbing layer” as recited in amended Claim 1.

In addition, because none of EP '439, Pampalone and Specht discloses or suggests the “applying a coating solution” and the “forming a light absorbing layer” as recited in amended

Claim 1, the combined teachings of these references do not render obvious the method as recited in amended Claim 1.

Accordingly, it is respectfully submitted that independent Claim 1 and each of the claims depending therefrom are believed to patentably distinguish over EP '439, Pampalone and Specht, and that the above-noted benefit obtained thereby is not obviated.

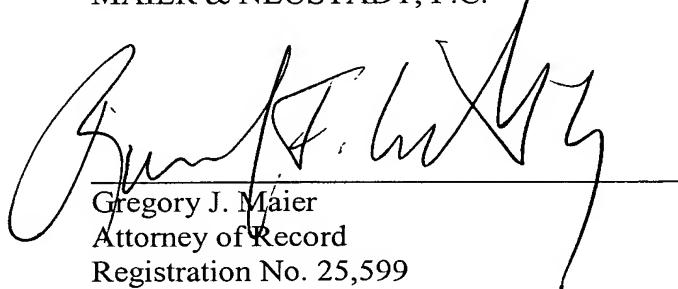
In addition, Applicants respectfully submit that none of EP '439, Pampalone and Specht discloses or suggests the "co-initiator" as recited in amended Claim 2.

Accordingly, it is respectfully submitted that Claim 2 is believed to patentably distinguish over EP '439, Pampalone and Specht.

Consequently, in light of the above discussion, and in view of the present amendment, the present application is believed to be in condition for allowance, and an early action favorable to that effect is respectfully requested.

Respectfully submitted,

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